



TECHNICAL INFORMATION

KALEX® 16308 URETHANE ADHESIVE SYSTEM

PRODUCT DESCRIPTION

KALEX® 16308 is a fast setting, flexible, elastomeric, two-component polyurethane adhesive. It exhibits excellent peel strength and low temperature flexibility. It is recommended for difficult to bond thermoplastics, leather, natural and synthetic rubber, RIM products and other flexible substrates.

KALEX® 16308 is available in the unique DOUBLE/BUBBLE® job sized package as reorder no. 04024.

MIXING AND CURING SCHEDULE

The production of the desired polyurethane requires accurate measurement of the two components and adequate mixing. In general, hand-mixing small production runs is easily accomplished by weighing the two components. Machine mixing utilizes the volumetric ratio. Most machines are calibrated by weighing the components and adjusting the volume ratio. Larger volume hand mixing is easily controlled by filling pre-measured buckets to the indicated heights. The mix ratios are shown below.

<u>Ratio</u>	<u>Part A</u>	<u>Part B</u>
Parts by weight	100	67
Parts by volume	100	39

The cure schedule is dependent upon the temperature. The recommended cure schedule will vary with the desired properties. The recommended schedule to achieve the typical properties is shown below:

7 days at 25 °C (77°F).

TYPICAL UNCURED PROPERTIES

	<u>Part A</u>	<u>Part B</u>	<u>Mixed</u>
Color	Amber	Black	Black
Viscosity @ 25 °C,cps	45,000	35,000	40,000
Weight per Gallon, lbs.	8.46	14.52	10.16
Specific Gravity @ 25 °C	1.01	1.74	1.22
Gel time, minutes			7
4 gm mass @ 25 °C	---	---	7
Filler Type	None	Non-Abrasive	Non-Abrasive
Shelf Life (in separate sealed containers), months	12	12	---

TYPICAL CURED PROPERTIES

(Tested at 25 °C unless otherwise indicated)

<u>Test</u>	<u>Result</u>
Hardness, Shore D	40
Tensile Strength, psi	>2,900
Elongation, %	>450
Tear Strength, pli	475

Abrasion Resistance 64

Lap Shear Strength

(Al/Al, 2024-T3 acid etched; cure schedule 7 days @ 25 °C)

Test Temperature, °C	-40	25	82	149
Shear Strength, psi	4,310	950	390	175

T-Peel Strength

(Al/Al, 2024-T3 acid etched; cure schedule 7 days @ 25 °C)

Test Temperature, °C	-40	25	82
Peel Strength, pli	83	24	15

STORAGE AND HANDLING

These materials should be stored in a dry environment within a moderate temperature range. Extended exposure to temperatures above 35°C begins to degrade the Part A. Avoid exposing either component to moisture.

Moisture reacts with the A-side to create minor levels of by products. Low levels will not degrade the final polyurethane. Moisture contamination of the B-side will cause some gas bubbles in the cured product. Purge the container with dry air before closing to maintain the storage life.

When using meter-mixed dispense equipment (MMD), blanket the reservoir with nitrogen or dry air to avoid moisture and other contamination.

Avoid contamination with oxidized metals (such as copper, brass, or mild steel), and rust or other metal oxides. The stability of the product is greatly reduced by materials such as strong acids or bases, sulfur compounds, amines, or reducing agents of any type.

SAFETY

These materials are intended for industrial use only, and the practices of good housekeeping, safety and cleanliness should be followed before, during and after use.

Although the system contains low volatility materials, care should be taken in handling. Use adequate ventilation in the work area.

These materials may cause dermatitis in susceptible individuals. Keep off skin and out of eyes.

In case of accidental skin contact, wash thoroughly with soap and water. In case of eye contact, flush eyes thoroughly with water and consult a physician immediately.

Refer to Material Safety Data Sheet for additional information.

ADDITIONAL INFORMATION

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NOTE

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